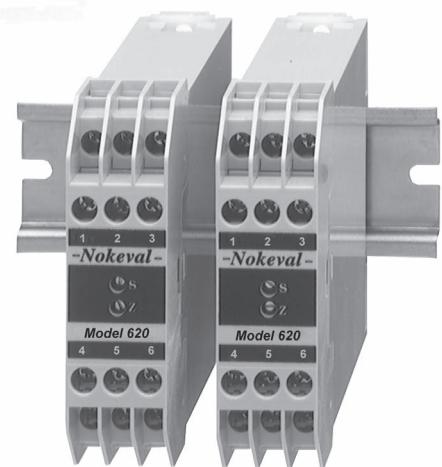


# 2-wire temperature transmitter 620S for Pt100 sensors

- **Input range -200...+700°C**
- **High accuracy  $\pm 0.05\%$  of span**
- **Leadwire compensation up to 100 ohms**
- **Linearization**
- **Small case 22.5 mm**
- **Mounting on DIN-rail**



Our model 620S temperature transmitter is designed to meet the most exacting temperature measuring requirements. Extreme accuracy is obtained by linearizing the measurement signal with an accuracy of 0.05 % to the temperature. Thus one transmitter can now replace several of narrower range without reducing accuracy. Leadwire resistance automatic compensation up to 50

ohms makes possible long transfer distances with small-crossarea signal cables. Range can easily be varied by changing the range resistors located under the front plate. Normally transmitters are delivered calibrated according to customer range requirements.

## Specifications:

Input	Pt100 according to DIN 43760
Accuracy	$\pm 0.05\%$ of span
Linearizing accuracy	$\pm 0.05\%$ of span
Ambient temperature effect	
- Span <100°C	$\pm 0.01\%/\text{°C}$
- Span >100°C	$\pm 0.005\%/\text{°C}$
Supply voltage effect	$\pm 0.005\%/\text{V}$
Repeatability	0.05 %
Response time	0.25 s
External leadwire resistance effect	$\pm 0.002\%/\text{ohm}$ typical max. 50 ohm / wire
Supply voltage range	12..40 VDC, reverse polarity protected
Output	4..20 mA
Min. output	3.8 mA
Current limitation	27 mA
Sensor current	0.7 mA
Operating temperature	0..55 °C
Storage temperature	-10..+70 °C

Wall and DIN 46277 rail mountings  
Terminal board for 2 x 1.5 mm<sup>2</sup>

Module width 22.5 mm  
Housing polycarbonate, IP10  
Weight 200 g  
Temperature range -200..+800°C  
Min. span 50°C  
Max. span 800°C

## How to order

Model                    620S - Pt100 - 0 / 200  
Sensor                    \_\_\_\_\_  
Output 4 mA (°C)        \_\_\_\_\_  
Output 20 mA (°C)        \_\_\_\_\_

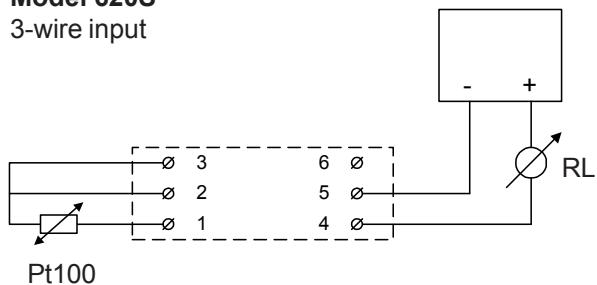
For example, range 0-100°C, type 620S-Pt100-0/100

## Connection diagram

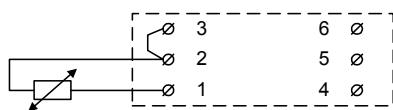
## Max. loop resistance RL

### Model 620S

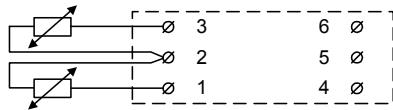
3-wire input



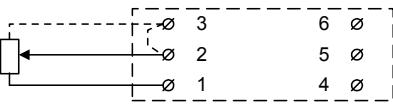
### 2-wire input



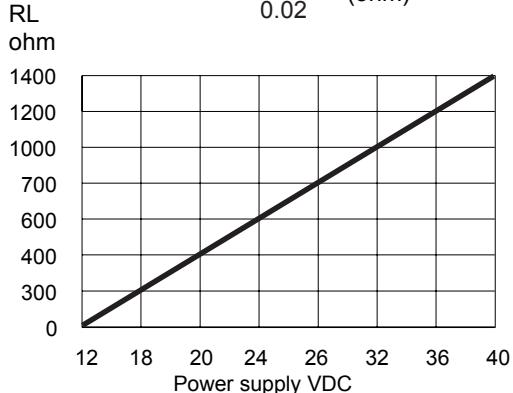
### Difference measurement (special order)



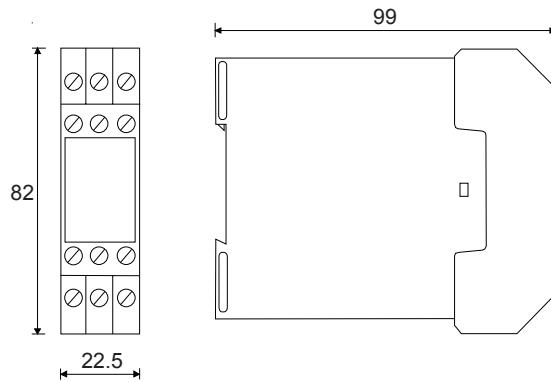
### Potentiometer (special order)



$$RL = \frac{+V - 12}{0.02} \text{ (ohm)}$$



## Dimensions



Connectors 2 x 2.5 mm  
Mounting DIN 46277